SERVICE MANUAL

SANYO

RADIO CASSETTE RECORDER

M2565LU

4 BAND RADIO CASSETTE RECORDER
FM
SW
MW
LW
PLAY
AUTO STOP
SANYO

141 838 12

SPECIFICATIONS

Power Source	
AC	115V/230V (50/60 Hz)
DC	7.5V (D Cell, HP 2, R 20, Monozellen) x 5
Output Power	3.5 W (max.)
Power Consumption	9 W
Current Consumption (at VR min.)	
Recording mode	260 mA
Recording System	AC Bias
Erasing System	AC Erasing
Tape Speed	4.75 cm/sec. ±3 %
Fast Forward Time	140 sec. (C-60 cassette)
Rewind Time	140 sec. (C-60 cassette)
Wow & Flutter	0.35 % RMS
Frequency Response	125 – 8,000 Hz
Signal to Noise Ratio	Better than 40dB

Hum & Noise	Less than –30dBs
Crosstalk	
Track to Track	Better than 55dB
Distortion (3rd harminic)	10 %
Terminal Impedance	
MIC	10 k-ohm
DIN INPUT	6.8 k-ohm
DIN OUTPUT	1 k-ohm
Ext. Speaker	8 ohm
Frequency Range	
LW	150 – 350 kHz
MW	525 – 1605 kHz
SW	5.8 – 18 MHz
FM	87.5 – 108 MHz

–Specifications subject to change without notice.–

WM-3529

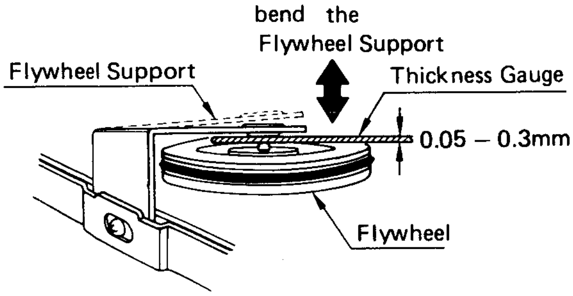
MECHANICAL ADJUSTMENTS

GENERAL REMARKS

Before adjusting the mechanism of the unit, wipe the tape contact surfaces clean as well as the contact surfaces of the driving parts with a soft cloth soaked in alcohol.
Trouble may occur because of oil and grease stains.

FLYWHEEL SUPPORT ADJUSTMENT

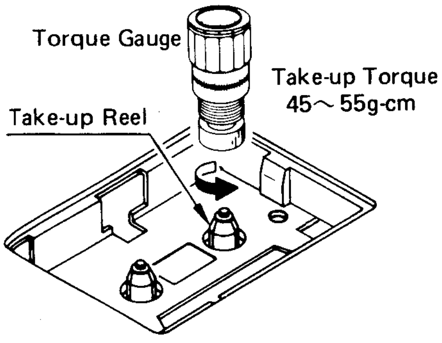
1. Turn the chassis over and measure the clearance between the Flywheel Support and the Flywheel.
   It should be 0.05 – 0.3mm.


bend the
Flywheel Support
Flywheel Support
Thickness Gauge
0.05 – 0.3mm
Flywheel

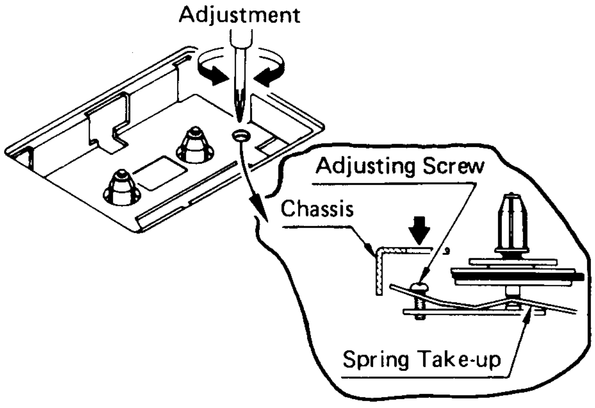
2. If necessary, adjust the clearance by bending the Flywheel Support as illustrated.

TAKE-UP TORQUE ADJUSTMENT

1. Remove the cassette compartment lid from the unit.
2. Measure the torque of the Take-up Reel with a torque gauge in the playback mode.
   It should be 45 – 55g-cm.


Torque Gauge
Take-up Torque
45～55g-cm
Take-up Reel

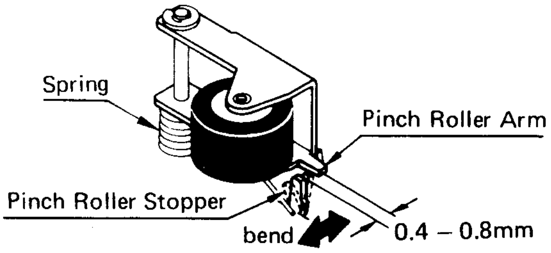
3. If necessary, adjust the troque by turning the adjusting screw as illustrated.


Adjustment
Adjusting Screw
Chassis
Spring Take-up

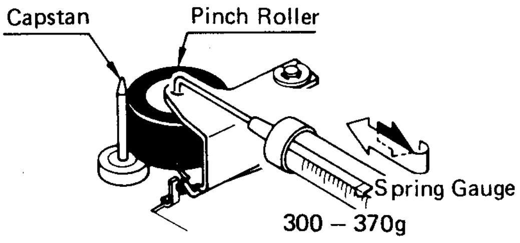
4. After the adjustment, secure the screw with paint or glue.

PINCH ROLLER ADJUSTMENT

1. The clearance between the Pinch Roller Stopper and the Pinch Roller Arm should be 0.4 – 0.8mm with the unit in the playback mode.
   * If necessary, adjust the clearance by bending the Stopper as illustrated.


Spring
Pinch Roller Arm
Pinch Roller Stopper
bend
0.4 – 0.8mm

2. Measure the pinch roller pressure with a spring gauge (500g) in the playback mode by the following procedure.
   * Hook the gauge to the Pinch Roller and pull it away from the Capstan as illustrated. Then, measure the pressure the moment the Pinch Roller comes in contact with the Capstan again and the Pinch Roller starts rotating.

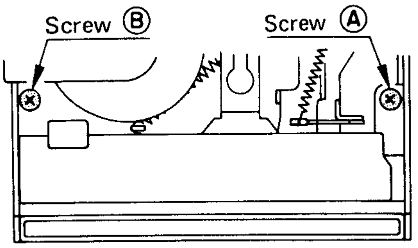

Capstan
Pinch Roller
Spring Gauge
300 – 370g

3. If necessary, adjust the pressure by bending the spring or replace it with a new one.

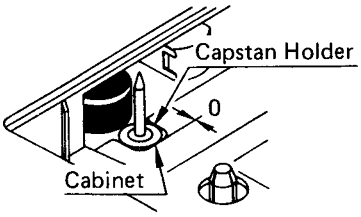
MECHANICAL ADJUSTMENTS (Continued)

INSTRUCTION FOR CHASSIS MOUNTING

1. Whenever the Chassis is mounted on the Cabinet, tighten the screws (A) and (B) in that order as illustrated.


Screw Ⓑ
Screw Ⓐ

2. When tightening the screws, be careful not to leave clearance between the Cabinet and the Capstan Holder as illustrated.

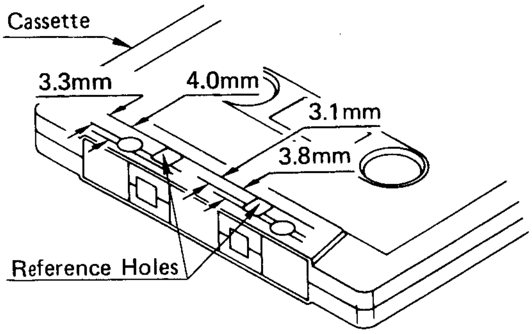

Capstan Holder
0
Cabinet

3. If there be clearance after the Chassis is mounted on the Cabinet, it will be impossible to measure the head position correctly.

HEAD POSITION ADJUSTMENT

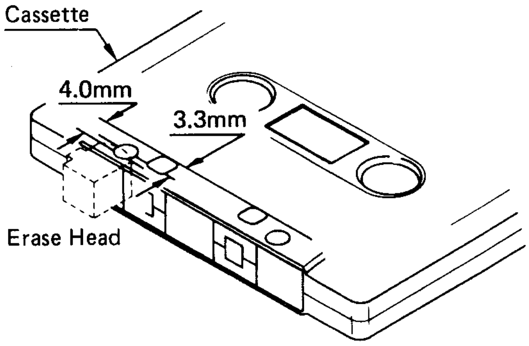
NOTE:

A cassette with the reference lines drawn on it, as shown, can be used as a facilitating gauge for the head position adjustment. (Do not use a worn cassette.)

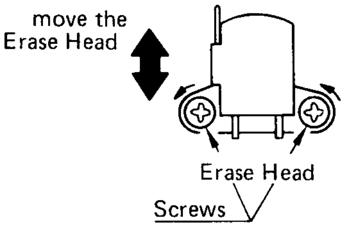

Cassette
3.3mm
4.0mm
3.1mm
3.8mm
Reference Holes

If the Erase Head has been replaced or disassembled, adjust its position by the following procedure.

1. Insert the above described cassette into the unit and set the unit in the playback mode.
2. Measure the distance from the reference holes on the cassette to the Erase Head.
   The distance should be 3.3 – 4.0mm.


Cassette
4.0mm
3.3mm
Erase Head

3. If necessary, remove the Chassis from the Cabinet.
4. Loosen the screws fastening the Erase Head and adjust the head position by moving it as illustrated.

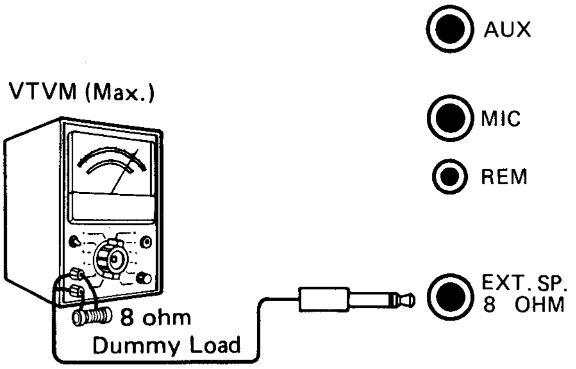

move the Erase Head
Erase Head
Screws

5. Retighten the screws and mount the Chassis on the Cabinet again following Instruction for Chassis Mounting.
6. After re-checking the head position, secure the screws with paint or glue.

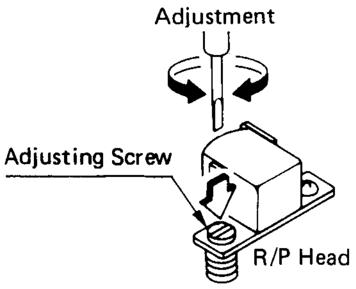
ELECTRICAL ADJUSTMENTS

HEAD AZIMUTH ADJUSTMENT

1. Connect a VTVM with 8 ohm dummy load to the earphone jack as illustrated and play back a 6.3 kHz test tape (Example: TEAC MTT-113).


AUX
VTVM (Max.)
MIC
REM
EXT. SP.
8 OHM
8 ohm
Dummy Load

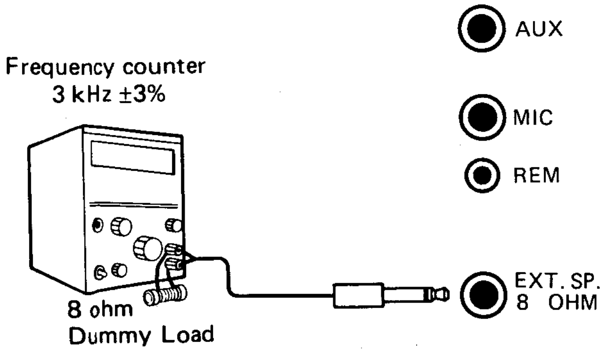
2. Insert an alignment tool into the azimuth adjusting hole of the Cabinet Top and turn the azimuth adjusting screw to obtain the maximum reading on the VTVM.


Adjustment
Adjusting Screw
R/P Head

3. After the adjustment, secure the screw with paint or glue.

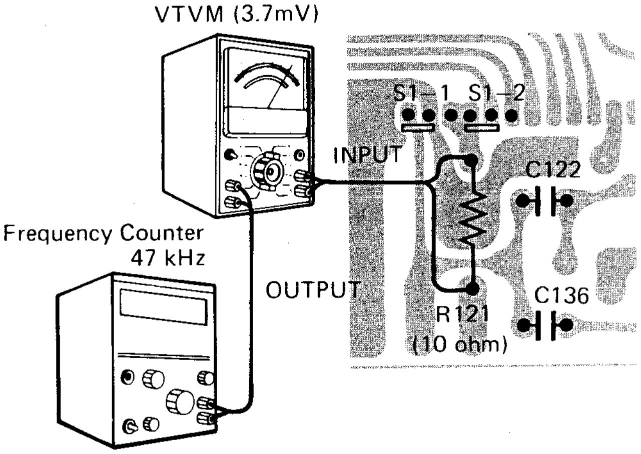
TAPE SPEED ADJUSTMENT

1. Connect a frequency counter with 8 ohm dummy load to the earphone jack as illustrated and play back a 3 kHz test tape (Example: TEAC MTT-111).
2. Insert an alignment tool into the tape speed adjusting hole of the Cabinet Top and turn the potentiometer inside the Motor until the frequency counter reads 3 kHz±3%.


AUX
Frequency counter
3 kHz ±3%
MIC
REM
EXT. SP.
8 OHM
8 ohm
Dummy Load

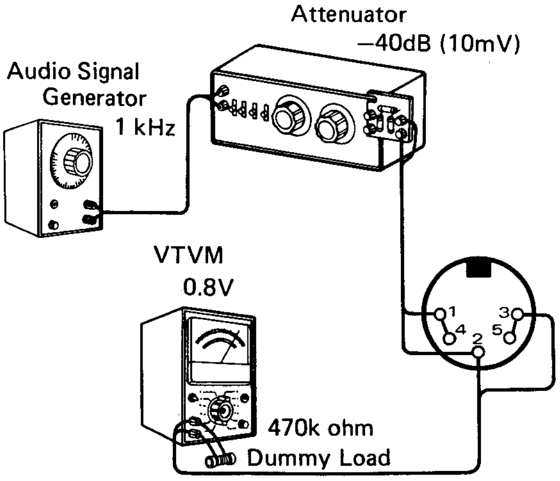
OSCILLATION & RECORDING BIAS ADJUSTMENTS

1. Set the OSC switch to position 2.
2. Connect a VTVM across the resiston R121 (10 ohm) on the Amplifier P.C.Board and a frequency counter to the output of the VTVM as illustrated.
3. With the unit in the recording mode, turn the core of the OSC transformer (T101) until the frequency counter reading becomes 47 kHz.
4. Then, adjust the potentiometer (P102) until the VTVM reading becomes 3.7 mV (370μA).


VTVM (3.7mV)
S1-1
S1-2
INPUT
C122
Frequency Counter
47 kHz
OUTPUT
R121
(10 ohm)
C136

DIN OUTPUT LEVEL ADJUSTMENT

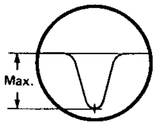
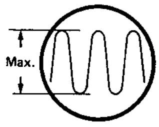
1. Connect an audio signal generator and an attenuator to the input terminals of Radio DIN socket, and a VTVM with a 470 k-ohm dummy load to the output terminals of Radio DIN socket as illustrated.
2. Insert a standard cassette tape (Example: BASF TP-18LHS) into the cassette compartment and record the 1 kHz signal from the audio signal genrator at –40dB (10 mV) on the tape.
3. While the recorded signal is being played back, check that the output level is 0.8 V.
4. If not, turn the potentiometer (P101) and re-check the output again after the recording and playback operations for the signal.
5. Repeat the above adjustment until the specified value is obtained.


Attenuator
–40dB (10mV)
Audio Signal
Generator
1 kHz
VTVM
0.8V
1
3
4
2
5
470k ohm
Dummy Load

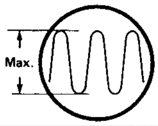
TUNER ADJUSTMENT

MW ALIGNMENT

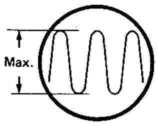
Standard test frequency 400 Hz and modulation 30% at AM

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
		INPUT	OUTPUT				
1	Calibration of IF for AM	Connect standard loop antenna to output terminal of gene-scope. Place bar antenna 60 cm away from loop antenna.	Connect input terminal of gene-scope to detector output.	460 kHz	Low End	T5, T6 and T9	Obtain symmetrical curve and maximum amplitude. 
2	Calibration of Tuning Range	Connect standard loop antenna to output of signal generator. Place bar antenna 60 cm away from loop antenna.	Connect VTVM with 8 ohm dummy load and oscilloscope to Ext. speaker terminal.	505 kHz		T3	Obtain sine-wave of 400 Hz and maximum amplitude. 
3				1670 kHz	High End	TC7	
4	Adjustment of Tracking			600 kHz	600 kHz	L6-1 (bar ant. coil)	
5				1400 kHz	1400 kHz	TC4	
6	Repeat the above adjustments.						

LW ALIGNMENT

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
		INPUT	OUTPUT				
1	Calibration of Tuning Range	Connect standard loop antenna to output of signal generator. Place bar antenna 60 cm away from loop antenna.	Connect VTVM with 8 ohm dummy load and oscilloscope to Ext. speaker terminal.	145 kHz	Low End	T4	Obtain sine-wave of 400 Hz and maximum amplitude. 
2				365 kHz	High End	TC8	
3	Adjustment of Tracking			170 kHz	170 kHz	L6-2 (bar ant. coil)	
4				310 kHz	310 kHz	TC5	
5	Repeat the above adjustments.						

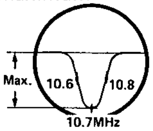
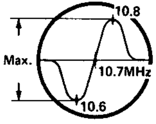
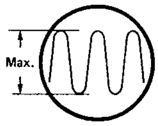
SW ALIGNMENT

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
		INPUT	OUTPUT				
1	Calibration of Tuning Range	Connect signal generator to antenna terminal through dummy antenna.	Connect VTVM with 8 ohm dummy load and oscilloscope to Ext. speaker terminal.	5.75 MHz	Low End	T2	Obtain sine-wave of 400 Hz and maximum amplitude. 
2				18.7 MHz	High End	TC6	
3	Adjustment of Tracking			6.5 MHz	6.5 MHz	L4	
4				17.0 MHz	17.0 MHz	TC3	
5	Repeat the above adjustments.						

* **Use a screwdriver with plastic grip for all adjustments.**

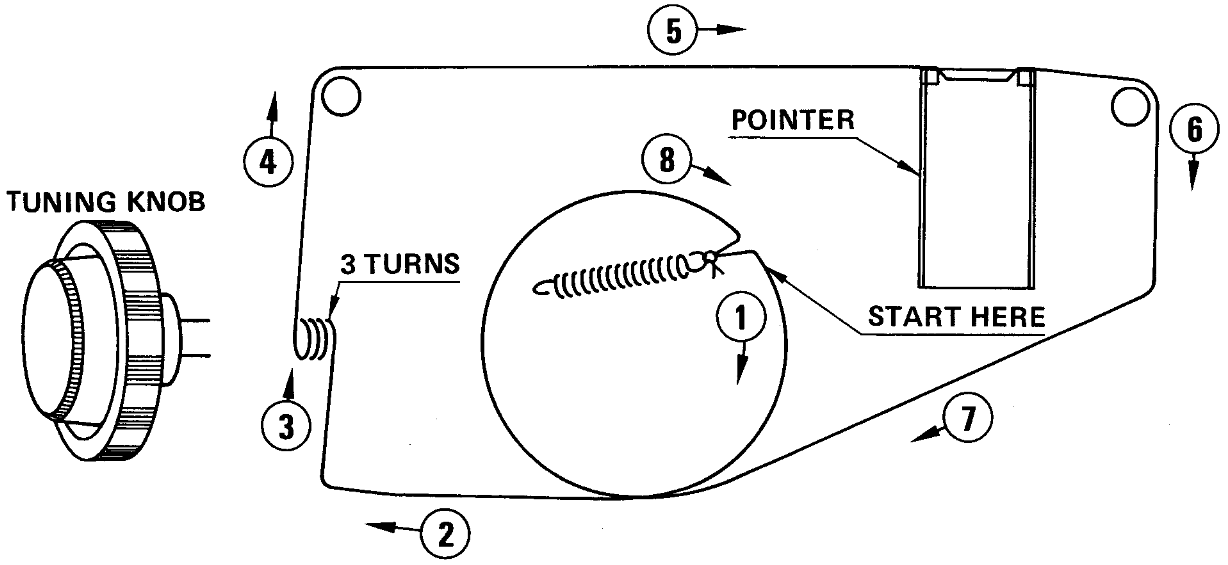
TUNER ADJUSTMENT (Continued)

FM ALIGNMENT **Standard test frequency 400 Hz and deviation 22.5 kHz**

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
		INPUT	OUTPUT				
1	Calibration of IF	Place output of gene-scope on Trap Coil (L2).	Connect input terminal of gene-scope to detector output.	10.7 MHz	Low End	Turn T8 (blue core) fully counter-clockwise. T1 and T2	Obtain symmetrical curve and maximum amplitude. 
2						T8 (blue core)	Obtain S curve and maximum amplitude. 
3	Calibration of Tuning Range	Connect signal generator to antenna terminal through dummy antenna.	Connect VTVM with 8 ohm dummy load and oscilloscope to Ext. speaker terminal.	87.2 MHz		L3	Obtain sine-curve and maximum amplitude. 
4				109.0 MHz	High End	TC2	
5	Adjustment of Tracking			90 MHz	90 MHz	L1	
6				106 MHz	106 MHz	TC1	
7	Repeat the above adjustments.						

* **Use a screwdriver with plastic grip for all adjustments.**

DIAL CORD STRINGING



PARTS LIST

Ref. No.	Part No.	Description	Q'ty
PACKAGE			
	141 6 1419 33014	Individual Carton	1
	141 6 1449 47500	Case, Right	1
	141 6 1449 47600	Case, Left	1
	141 6 2519 08390	Poly Cover	1
	141 6 4559 00100	Serial No. Sheet	3
ACCESSORIES			
	4 2419 71002	Cassette	1
	4 2439 70310	Power Cord	1
	141 6 2519 05790	Poly Pouch	1
	141 6 4119 76300	Instrunction Book	1
	141 6 4729 07400	Caution Label	1
	141 6 4729 16700	Caution Label	1
CABINET			
SP1	4 1519 70580	Speaker (8 ohm)	1
	4 1539 70560	Microphone	1
S4	4 2319 72010	Leaf Switch (Power Switch)	1
S7	4 2319 72130	Slide Switch (Voltage Switch)	1
	4 2359 70980	Connector	1
	4 2359 72800	AC Socket	1
	4 2449 70160	Antenna	1
T101	4 2519 72640	Power Transformer	1
	4 5279 70762	Motor	1
	141 0 1119 44707	Cabinet Top Complete	1
	141 0 1119 52101	Cabinet Bottom Assy	1
	141 0 1719 06600	Handle Assy	1
	141 2 1249 14900	Cassette Lid	1
	141 2 1339 17500	Battery Lid	1
	141 2 2719 07900	Spacer, Handle	2
	141 2 3529 08600	Spacer, Record Lock	1
	141 2 3659 11400	Function Bracket	1
	141 2 3829 06700	Battery Terminal, Anode	1
	141 2 3829 22400	Spring, Battery	1
	141 2 3829 23300	Spring, Battery	1
	141 2 4219 11600	Screw	4
	141 2 4219 11700	Screw	2
	141 2 4359 14404	Socket Cover	1
	141 2 4419 07201	Cassette Lid Cushion	2
	141 2 4469 22200	Cushion	1
	141 2 4569 00500	Washer, Battery Holder	1
	141 2 4729 03001	Lug	1
	141 2 4729 03400	Lug	1
	141 2 5649 05300	Counter Belt	1
	141 2 6219 01600	Function Lever	1
	141 2 8119 03400	Counter	1
	141 2 8139 03500	Counter Bracket	1
	141 2 8419 07101	Interlock	1
	141 2 8519 48000	Spring, Interlock	1
	141 2 8539 21800	Spring, Cassette	1
	141 2 8539 23200	Spring, Cassette Lid	1
C145		Electrolytic 100MF 10V	1
		Screw, Pan Hd. +M2.6x8	1
		Screw, Pan Hd. +M2.6x8	1
		Screw, Pan Hd. +M3.0x4	2
		Screw, Pan Hd. Tapping-2 +M2.6x10	2
		Screw, Pan Hd. Tapping-2 +M3.0x8	2
		Screw, Pan Hd. Tapping-2 +M3.0x10	6
		Screw, Pan Hd. Tapping-2 +M3.0x12	1
		Screw, Pan Hd. Tapping-2 +M3.0x18	2
		Screw, Pan Hd. Tapping-2 +M3x25	3
		Screw, Bind Hd. Tapping-2 +M2.0x8	2
		Finished Washer M3.0	2
D106		Diode, SLP-24B	1
	141 2 1639 19900	Volume Knob	2
	141 2 1639 20000	Tuning Knob	1
	141 2 1639 20100	Fine Knob	1

Ref. No.	Part No.	Description	Q'ty
POWER SUPPLY P.C.B. ASSY			
	4 1919 70921	Power Supply P.C.B. Assy	1
C147		Ceramic 0.022MF 50V +80, −20%	1
C148		Ceramic 0.022MF 50V +80, −20%	1
C149		Ceramic 0.022MF 50V +80, −20%	1
C150		Ceramic 0.022MF 50V +80, −20%	1
C151		Electrolytic 2200MF 16V	1
D103		Diode, DS18	1
D104		Diode, DS17	1
	4 2359 70910	Fuse Holder	2
F1	4 2349 70140	Fuse (1 AT)	1
RADIO TUNER P.C.B. ASSY			
	4 1259 71150	Radio Tuner P.C.B. Assy	1
	141 2 3229 24600	Shield Plate	1
L6	4 2579 70730	Bar Antenna	1
FB1	4 2539 70210	Bead Ferrite	1
BPF1	4 2539 70570	Band Pass Filter	1
CF1	4 2539 70580	Ceramic Filter	1
C1		Ceramic 0.022MF 50V +80, −20%	1
C2		Ceramic 0.022MF 50V +80, −20%	1
C3		Ceramic 18PF 50V ±5%	1
C4		Ceramic 5PF 50V ±0.2PF	1
C5		Ceramic 2PF 50V ±0.2PF	1
C6		Ceramic 220PF 50V ±10%	1
C7		Ceramic 0.022MF 50V +80, −20%	1
C8		Ceramic 0.022MF 50V +80, −20%	1
C9		Ceramic 0.022MF 50V +80, −20%	1
C10		Ceramic 5PF 50V ±0.2PF	1
C11		Ceramic 33PF 50V ±10%	1
C12		Ceramic 12PF 50V ±5%	1
C13		Ceramic 0.022MF 50V +80, −20%	1
C14		Eelctrolytic 47MF 6.3V	1
C15		Ceramic 6PF 50V ±0.5PF	1
C16		Ceramic 0.022MF 50V +80, −20%	1
C17		Ceramic 0.022MF 50V +80, −20%	1
C18		Ceramic 15PF 50V ±5%	1
C19		Ceramic 2PF 50V ±0.2PF	1
C20		Ceramic 10PF 50V ±5%	1
C21		Ceramic 25PF 50V ±0.2PF	1
C22		Ceramic 0.022MF 50V +80, −20%	1
C23		Ceramic 5PF 50V ±0.2PF	1
C24		Polystyrol 3900PF 50V ±5%	1
C25		Ceramic 10PF 50V ±5%	1
C26		Polystyrol 350PF 50V ±5%	1
C27		Ceramic 18PF 50V ±5%	1
C28		Polystyrol 200PF 50V ±5%	1
C29		Ceramic 100PF 50V ±10%	1
C30		Ceramic 0.022MF 50V +80, −20%	1
C31		Ceramic 0.022MF 50V +80, −20%	1
C32		Mylar 0.022MF 50V ±10%	1
C33		Mylar 0.022MF 50V ±10%	1
C34		Ceramic 0.022MF 50V +80, −20%	1
C35		Ceramic 0.001MF 50V ±10%	1
C36		Electrolytic 4.7MF 6.3V	1
C37		Ceramic 0.001MF 50V ±10%	1
C38		Mylar 0.0068MF 50V ±10%	1
C39		Ceramic 0.047MF 50V +80, −20%	1
C40		Mylar 0.0033MF 50V ±10%	1
C41		Electrolytic 1MF 6.3V	1
C42		Ceramic 0.022MF 50V +80, −20%	1
C43		Ceramic 0.022MF 50V +80, −20%	1
C44		Ceramic 0.022MF 50V +80, −20%	1
C45		Electrolytic 22MF 6.3V	1
C46		Ceramic 0.022MF 50V +80, −20%	1
C47		Electrolytic 47MF 6.3V	1
C48		Mylar 0.015MF 50V ±10%	1
C49		Ceramic 0.022MF 50V +80, −20%	1
C50		Mylar 0.01MF 50V ±10%	1
C51		Aluminum 0.22MF 6.3V +40, −20%	1
C52		Ceramic 0.022MF 50V +80, −20%	1

PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
	RADIO TUNER P.C.B. ASSY		
C53		Electrolytic 47MF 10V	1
C54		Ceramic 0.022MF 50V +80, −20%	1
C55		Ceramic 0.001MF 50V ±10%	1
C56		Ceramic 15PF 50V ±5%	1
C57		Ceramic 15PF 50V ±5%	1
D1		Diode, DS442	1
D2		Diode, 1S553	1
D3		Diode, 1S188	1
D4		Diode, 1S188	1
D5		Diode, 1S188	1
IC1	4 2069 70230	IC, MPC1018	1
	141 2 4729 04700	Staple 10	10
	141 2 4729 04400	Staple 12.5	1
L1	4 2599 70334	RF Coil	1
L2	4 2659 70220	Loading Coil	1
L3	4 2589 70911	OSC Coil	1
L4	4 2579 70721	Antenna Coil	1
L5	4 2659 70230	Loading Coil	1
L8	4 2659 70241	Loading Coil	1
PVC1	4 2249 70451	Variable Condenser	1
Q1		Transistor, 2SC930	1
Q2		Transistor, 2SC930	1
Q3		Transistor, 2SC930	1
Q4	4 2039 70431	Transistor, 2SC1815	1
Q5	4 2039 70431	Transistor, 2SC1815	1
R1		Carbon 390k ohm 1/4W ±5%	1
R2		Carbon 1k ohm 1/4W ±5%	1
R3		Carbon 100 ohm 1/4W ±5%	1
R4		Carbon 390k ohm 1/4W ±5%	1
R5		Carbon 5.6k ohm 1/4W ±5%	1
R6		Carbon 22 ohm 1/4W ±5%	1
R7		Carbon 100 ohm 1/4W ±5%	1
R8		Carbon 100 ohm 1/4W ±5%	1
R9		Carbon 390k ohm 1/4W ±5%	1
R10		Carbon 5.6k ohm 1/4W ±5%	1
R11		Carbon 100 ohm 1/4W ±5%	1
R12		Carbon 680k ohm 1/4W ±5%	1
R13		Carbon 100k ohm 1/4W ±5%	1
R14		Carbon 56 ohm 1/4W ±5%	1
R15		Carbon 33 ohm 1/4W ±5%	1
R16		Carbon 10 ohm 1/4W ±5%	1
R17		Carbon 56 ohm 1/4W ±5%	1
R18		Carbon 220 ohm 1/4W ±5%	1
R19		Carbon 1k ohm 1/4W ±5%	1
R20		Carbon 1k ohm 1/4W ±5%	1
R21		Carbon 4.7k ohm 1/4W ±5%	1
R22		Carbon 4.7k ohm 1/4W ±5%	1
R23		Carbon 1k ohm 1/4W ±5%	1
R24		Carbon 330k ohm 1/4W ±5%	1
R25		Carbon 47k ohm 1/4W ±5%	1
R26		Carbon 100 ohm 1/4W ±5%	1
R27		Carbon 10k ohm 1/4W ±5%	1
R28		Carbon 100 ohm 1/4W ±5%	1
R29		Carbon 2.2k ohm 1/4W ±5%	1
R30		Carbon 4.7k ohm 1/4W ±5%	1
R31		Carbon 3.3k ohm 1/4W ±5%	1
R32		Carbon 4.7k ohm 1/4W ±5%	1
R33		Carbon 10k ohm 1/4W ±5%	1
R34		Carbon 6.8k ohm 1/4W ±5%	1
R35		Carbon 1k ohm 1/4W ±5%	1
R36		Carbon 5.6k ohm 1/4W ±5%	1
R37		Carbon 10 ohm 1/4W ±5%	1
S5	4 2319 72181	Slide Switch (Band Selector)	1
TC3	4 2249 70290	Trimmer Condenser	1
TC5	4 2249 70350	Trimmer	1
TC6	4 2249 70290	Trimmer Condenser	1
TC7	4 2249 70290	Trimmer Condenser	1
TC8	4 2249 70350	Trimmer	1
TP1	4 2369 70740	RT Pin	1
TP2	4 2369 70240	GT Pin	1

Ref. No.	Part No.	Description	Q'ty
	RADIO TUNER P.C.B. ASSY		
TP3	4 2369 70740	RT Pin	1
TP4	4 2369 70740	RT Pin	1
TP5	4 2369 70740	RT Pin	1
TP6	4 2369 70740	RT Pin	1
TP7	4 2369 70740	RT Pin	1
TP8	4 2369 70740	RT Pin	1
T1	4 2569 70301	IFT	1
T2	4 2589 71420	OSC Transformer	1
T3	4 2589 71410	OSC Transformer	1
T4	4 2589 71400	OSC Transformer	1
T5	4 2569 70950	IFT	1
T6	4 2569 70960	IFT	1
T7	4 2569 70940	IFT	1
T8	4 2569 70331	IFT	1
T9	4 2569 70970	IFT	1
	AMP P.C.B. ASSY		
	4 1329 73491	Amplifier P.C.B Assy	1
C101		Mylar 0.056MF 50V ±10%	1
C102		Mylar 0.015MF 50V ±10%	1
C103		Electrolytic 100MF 6.3V	1
C104		Ceramic 47PF 50V ±10%	1
C105		Electrolytic 330MF 10V	1
C106		Electrolytic 4.7MF 10V	1
C107		Mylar 0.0012MF 50V ±10%	1
C108		Ceramic 560PF 50V ±10%	1
C109		Electrolytic 47MF 6.3V	1
C110		Mylar 0.0068MF 50V ±10%	1
C111		Electrolytic 10MF 10V	1
C113		Electrolytic 2.2MF 10V	1
C114		Ceramic 0.001MF 50V ±10%	1
C115		Electrolytic 22MF 6.3V	1
C116		Ceramic 330PF 50V ±10%	1
C117		Electrolytic 0.47MF 10V	1
C118		Electrolytic 100MF 6.3V	1
C119		Electrolytic 470MF 10V	1
C120		Electrolytic 220MF 10V	1
C121		Electrolytic 470MF 10V	1
C122		Ceramic 390PF 50V ±10%	1
C123		Mylar 0.0033MF 50V ±10%	1
C124		Electrolytic 47MF 6.3V	1
C125		Electrolytic 0.47MF 10V	1
C126		Electrolytic 4.7MF 10V	1
C127		Ceramic 0.001MF 50V ±10%	1
C128		Electrolytic 220MF 6.3V	1
C129		Electrolytic 100MF 10V	1
C130		Electrolytic 22MF 6.3V	1
C131		Ceramic 330PF 50V ±10%	1
C132		Electrolytic 0.47MF 10V	1
C133		Electrolytic 100MF 6.3V	1
C134		Electrolytic 470MF 10V	1
C135		Electrolytic 220MF 10V	1
C136		Ceramic 330PF 50V ±10%	1
C137		Mylar 0.0047MF 100V ±10%	1
C138		Mylar 0.018MF 50V ±10%	1
C139		Mylar 0.0068MF 50V ±10%	1
C140		Mylar 0.0022MF 50V ±10%	1
C141		Mylar 0.012MF 50V ±10%	1
C142		Mylar 0.027MF 50V ±10%	1
C143		Electrolytic 10MF 10V	1
C144		Electrolytic 100MF 10V	1
C146		Electrolytic 100MF 10V	1
C152		Ceramic 0.001MF 50V ±10%	1
C153		Ceramic 0.0022MF 50V ±10%	1
C154		Ceramic 220PF 50V ±10%	1
C155		Electrolytic 4.7MF 10V	1
C156		Electrolytic 10MF 10V	1
C157		Ceramic 220PF 50V ±10%	1
C160		Ceramic 680PF 50V ±10%	1
D101		Diode, DS448	1

PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
AMP P.C.B. ASSY			
D102		Diode, DS448	1
D105		Diode, DS448	1
J1	4 2359 71391	Jack 1P (Microphone)	1
J2	4 2359 71391	Jack 1P (Earphone)	1
J3	4 2359 71790	Jack 1P (Remote)	1
J4	4 2359 71550	DIN Socket 5P (Radio DIN)	1
L101	4 2559 70030	Coil (3.3 mH)	1
L102	4 2729 70080	Peaking Coil (3.9 mH)	1
L103	4 2539 70410	Choke Coil (500 µH)	1
P101	4 2229 72850	Potentiometer (B-350)	1
P102	4 2229 72100	Potentiometer (B-200k)	1
IC101	4 2069 70072	IC, TA7137	1
IC102		IC, LA4101	1
IC103		IC, LA4101	1
Q101		Transistor, 2SB22	1
Q102		Transistor, 2SC536	1
R101		Carbon 6.8k ohm 1/4W ±5%	1
R102		Carbon 10k ohm 1/4W ±5%	1
R103		Carbon 33k ohm 1/4W ±5%	1
R104		Carbon 560 ohm 1/4W ±5%	1
R105		Carbon 56k ohm 1/4W ±5%	1
R106		Carbon 3.3k ohm 1/4W ±5%	1
R107		Carbon 10k ohm 1/4W ±5%	1
R108		Carbon 5.6k ohm 1/4W ±5%	1
R109		Carbon 470k ohm 1/4W ±5%	1
R110		Carbon 18k ohm 1/4W ±5%	1
R111		Carbon 1k ohm 1/4W ±5%	1
R112		Carbon 680 ohm 1/4W ±5%	1
R113		Carbon 22k ohm 1/4W ±5%	1
R114		Carbon 1.8k ohm 1/4W ±5%	1
R115		Carbon 3.9k ohm 1/4W ±5%	1
R116		Carbon 10 ohm 1/4W ±5%	1
R117		Carbon 2.7k ohm 1/4W ±5%	1
R118		Carbon 5.6k ohm 1/4W ±5%	1
R119		Carbon 680 ohm 1/4W ±5%	1
R120		Carbon 47 ohm 1/4W ±5%	1
R121		Carbon 10 ohm 1/4W ±5%	1
R122		Carbon 12k ohm 1/4W ±5%	1
R123		Carbon 2.7M ohm 1/4W ±5%	1
R124		Carbon 220 ohm 1/4W ±5%	1
R125		Carbon 10 ohm 1/4W ±5%	1
R126		Carbon 2.2k ohm 1/4W ±5%	1
R127		Carbon 1.2k ohm 1/4W ±5%	1
R128		Carbon 15 ohm 1/4W ±5%	1
R129		Carbon 100 ohm 1/4W ±5%	1
R130		Carbon 22k ohm 1/4W ±5%	1
R131		Carbon 4.7 ohm 1/4W ±5%	1
R132		Carbon 10 ohm 1/4W ±5%	1
R135		Carbon 1.2k ohm 1/4W ±5%	1
R136		Carbon 10k ohm 1/4W ±5%	1
R137		Carbon 200 ohm 1/4W ±5%	1
R138		Carbon 470 ohm 1/4W ±5%	1
R140		Carbon 1M ohm 1/4W ±5%	1
R145		Carbon 6.8k ohm 1/4W ±5%	1
R146		Carbon 6.8k ohm 1/4W ±5%	1
S1	4 2319 72191	Slide Switch (Record/Play Switch)	1
S2	4 2319 70571	Slide Switch (Function Switch)	1
S3	4 2319 71900	Slide Switch (Beat Switch)	1
S6	4 2319 71990	Slide Switch (DIN)	1
T102	4 2589 71100	OSC Transformer	1
	141 2 4729 04400	Staple 12.5	18
	141 2 4729 05000	Staple 5	7
RADIO CHASSIS			
VR101	4 2229 71650	Volume Control (Tone, A-20k)	1
VR102	4 2229 71650	Volume Control (Volume, A-20k)	1
FT1	4 2249 70300	Fine Tuner	1
	141 0 3119 13700	Radio Chassis Assy	1
	141 2 2419 11800	Switch Veil	1
	141 2 3229 22400	Shield Plate	1

Ref. No.	Part No.	Description	Q'ty
RADIO CHASSIS			
	141 2 3529 08600	Spacer, Record Lock	1
	141 2 3529 17200	Spacer, Band Select	1
	141 2 3659 11300	Band Select Bracket	1
	141 2 3849 03100	Antenna Holder	2
	141 2 4469 21600	Cushion	1
	141 2 4539 05100	Washer	1
	141 2 4579 00900	Fiber Washer	1
	141 2 5119 03100	Pointer	1
	141 2 5389 01600	Drum	1
	141 2 6219 01500	Band Select Lever	1
	141 2 8219 21905	Dial Plate	1
	141 2 8519 06700	Spring, CST Case Lever B	1
C112		Mylar 0.068MF 50V ±10%	1
		Screw, Pan Hd. +M2.6x4	4
		Screw, Pan Hd. +M2.6x8	2
		Screw, Pan Hd. Tapping-2 +M2.6x10	2
		Screw, Pan Hd. Tapping-2 +M3.0x10	4
		Finished Washer M2.6	1
MECHANISM			
HD1	4 2429 70280	Erase Head	1
HD2	4 2429 71090	R/P Head	1
	141 0 3119 11700	Chassis Assy	1
	141 0 3519 07500	Flywheel Support Assy	1
	141 0 5219 03700	Flywheel Complete	1
	141 0 5319 02501	Take-up Pulley Assy	1
	141 0 5319 03100	Take-up Reel Assy	1
	141 0 5319 03200	Supply Reel Complete	1
	141 0 5419 02200	Pinch Roller Assy	1
	141 0 5559 02203	Record Arm Assy	1
	141 0 5559 02800	Rewind Arm Assy	1
	141 0 5559 02900	F. FWD Arm Assy	1
	141 0 6119 02600	Eject Lever Assy	1
	141 0 6119 02601	Stop Lever Assy	1
	141 0 6119 02602	F.F. Lever Assy	1
	141 0 6119 02603	Play Lever Assy	1
	141 0 6119 02604	Rewind Lever Assy	1
	141 0 6119 02605	Record Lever Assy	1
	141 0 7419 13200	Sensor Plate Assy	1
	141 2 3519 24900	Stop Lever Bracket	1
	141 2 3529 11700	Spacer, Stop	1
	141 2 4179 00700	Nut, Dial Shaft	1
	141 2 4219 02900	Screw	1
	141 2 4219 06300	Screw	2
	141 2 4539 06900	Washer	1
	141 2 4539 08200	Washer	1
	141 2 4539 12100	Washer, Spindle	1
	141 2 4729 03600	Lug	1
	141 2 5519 26200	Counter Pulley	1
	141 2 5649 06300	Drive Belt	1
	141 2 5649 06400	Capstan Belt	1
	141 2 5729 09700	Capstan Holder	1
	141 2 5729 10900	Reel Holder	1
	141 2 6139 10700	Select Button Frame	1
	141 2 6139 10800	Select Frame	1
	141 2 7149 01700	Brake Arm	1
	141 2 7319 20301	Slide Base	1
	141 2 7319 21800	Plate, Lock	1
	141 2 7319 24500	Plate, Eject Slide	1
	141 2 7419 29200	Stop Lever	1
	141 2 7419 36400	Eject Lever	1
	141 2 8519 25100	Spring, Interlock Lever	1
	141 2 8519 25900	Spring, Rewind Arm	4
	141 2 8519 47400	Spring, Head	1
	141 2 8519 47900	Spring, Pinch Roller	1
	141 2 8519 48200	Spring, Slide Base	2
	141 2 8519 48300	Spring, F. FWD Arm	1
	141 2 8519 48400	Spring, Switch Plate	1
	141 2 8519 53500	Spring, Plunger Lever	1
	141 2 8519 57300	Spring, Stop Lever	1

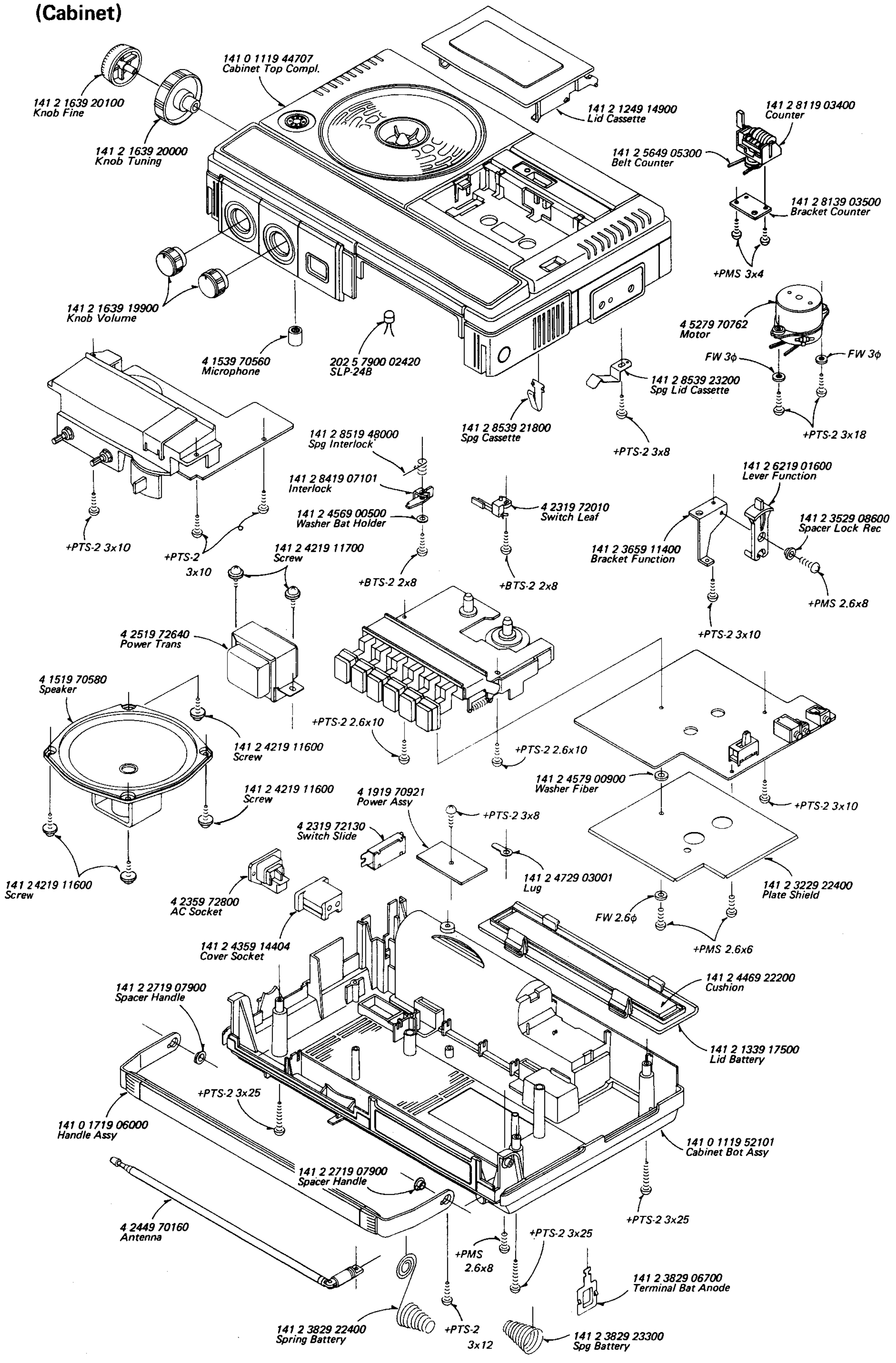
PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
MECHANISM			
	141 2 8519 76000	Spring, Stop	1
	141 2 8539 19500	Spring, Take-up	1
		Screw, Pan Hd. +M2.6x12	2
		Screw, Cylinder Hd. -M2.0x8	1
		Screw, Pan Hd. Tapping-2 +M2.6x6	1
		Screw, Pan Hd. Tapping-2 +M2.6x8	1
		Screw, Pan Hd. Tapping-3 +M2.0x5	1
		Screw, Pan Hd. Tapping-3 +M2.5x10	1
		Screw, Bind Hd. Tapping-3 +M2.0x6	2
		E Ring M2.0	2
		G Ring M3.0	1

NOTES:
1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

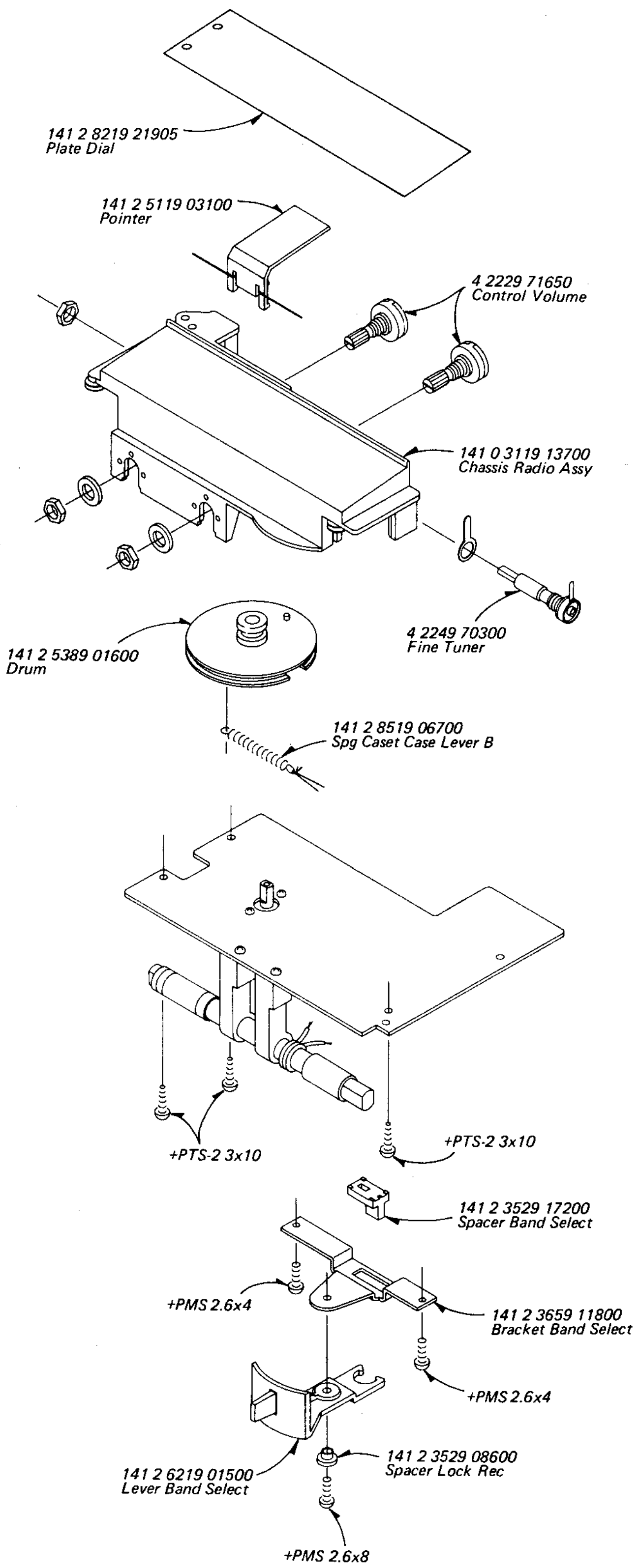
EXPLODED VIEW

(Cabinet)


141 0 1119 44707
Cabinet Top Compl.
141 2 1639 20100
Knob Fine
141 2 1639 20000
Knob Tuning
141 2 1249 14900
Lid Cassette
141 2 8119 03400
Counter
141 2 5649 05300
Belt Counter
141 2 8139 03500
Bracket Counter
+PMS 3x4
141 2 1639 19900
Knob Volume
4 1539 70560
Microphone
202 5 7900 02420
SLP-24B
4 5279 70762
Motor
FW 3ϕ
FW 3ϕ
141 2 8539 23200
Spg Lid Cassette
+PTS-2 3x18
141 2 8539 21800
Spg Cassette
+PTS-2 3x8
141 2 8519 48000
Spg Interlock
141 2 8419 07101
Interlock
141 2 4569 00500
Washer Bat Holder
4 2319 72010
Switch Leaf
141 2 6219 01600
Lever Function
141 2 3529 08600
Spacer Lock Rec
141 2 3659 11400
Bracket Function
+PMS 2.6x8
+PTS-2 3x10
+PTS-2
3x10
141 2 4219 11700
Screw
+BTS-2 2x8
+BTS-2 2x8
+PTS-2 3x10
4 2519 72640
Power Trans
4 1519 70580
Speaker
+PTS-2 2.6x10
141 2 4219 11600
Screw
+PTS-2 2.6x10
141 2 4579 00900
Washer Fiber
+PTS-2 3x10
141 2 4219 11600
Screw
4 1919 70921
Power Assy
+PTS-2 3x8
4 2319 72130
Switch Slide
141 2 4729 03001
Lug
141 2 3229 22400
Plate Shield
141 2 4219 11600
Screw
4 2359 72800
AC Socket
FW 2.6ϕ
+PMS 2.6x6
141 2 4359 14404
Cover Socket
141 2 4469 22200
Cushion
141 2 2719 07900
Spacer Handle
141 2 1339 17500
Lid Battery
+PTS-2 3x25
141 0 1719 06000
Handle Assy
141 0 1119 52101
Cabinet Bot Assy
141 2 2719 07900
Spacer Handle
4 2449 70160
Antenna
+PTS-2 3x25
+PMS
2.6x8
+PTS-2 3x25
141 2 3829 06700
Terminal Bat Anode
141 2 3829 22400
Spring Battery
+PTS-2
3x12
141 2 3829 23300
Spg Battery

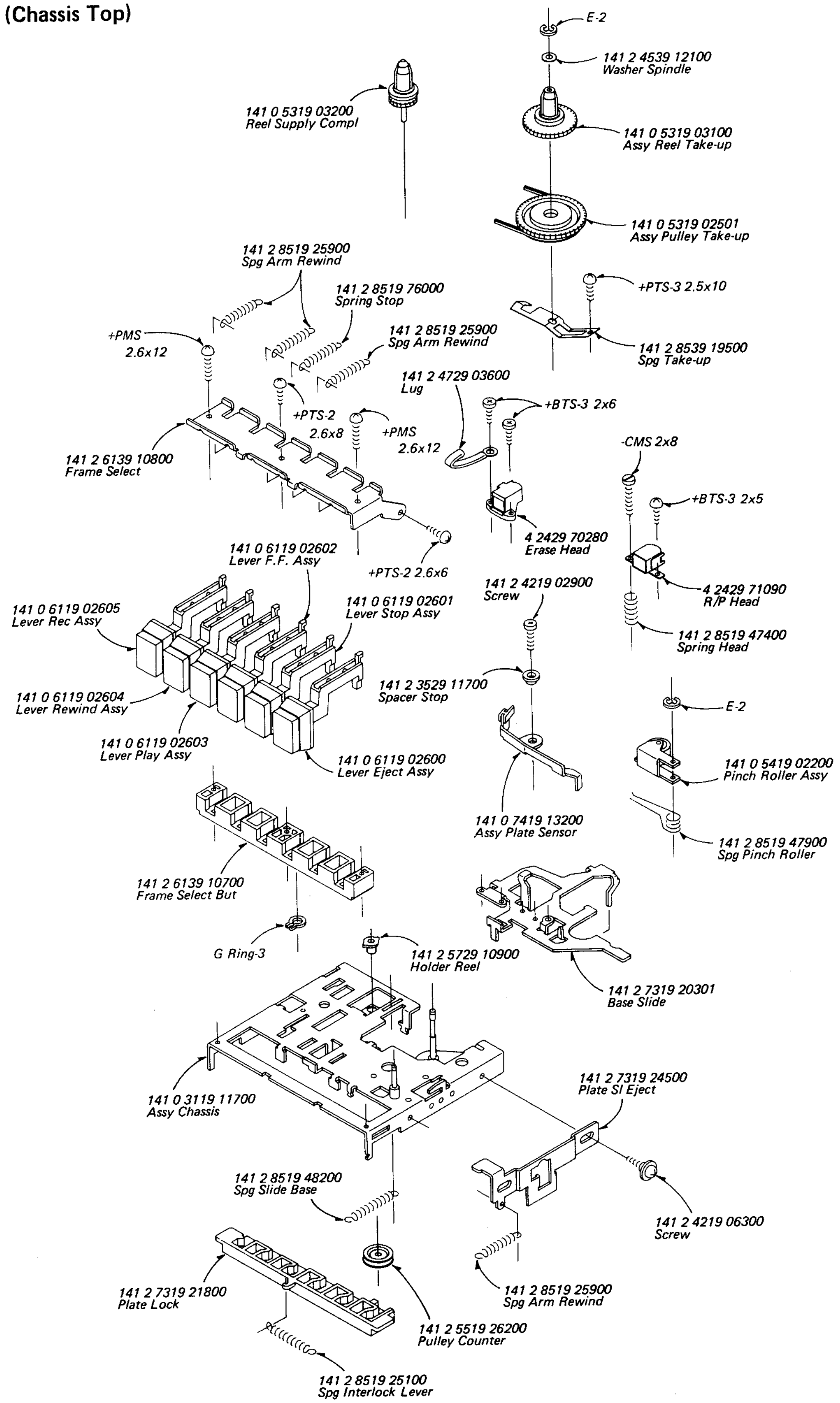
EXPLODED VIEW (Continued)

(Radio Chassis)


141 2 8219 21905
Plate Dial
141 2 5119 03100
Pointer
4 2229 71650
Control Volume
141 0 3119 13700
Chassis Radio Assy
4 2249 70300
Fine Tuner
141 2 5389 01600
Drum
141 2 8519 06700
Spg Caset Case Lever B
+PTS-2 3x10
+PTS-2 3x10
141 2 3529 17200
Spacer Band Select
+PMS 2.6x4
141 2 3659 11800
Bracket Band Select
+PMS 2.6x4
141 2 3529 08600
Spacer Lock Rec
141 2 6219 01500
Lever Band Select
+PMS 2.6x8

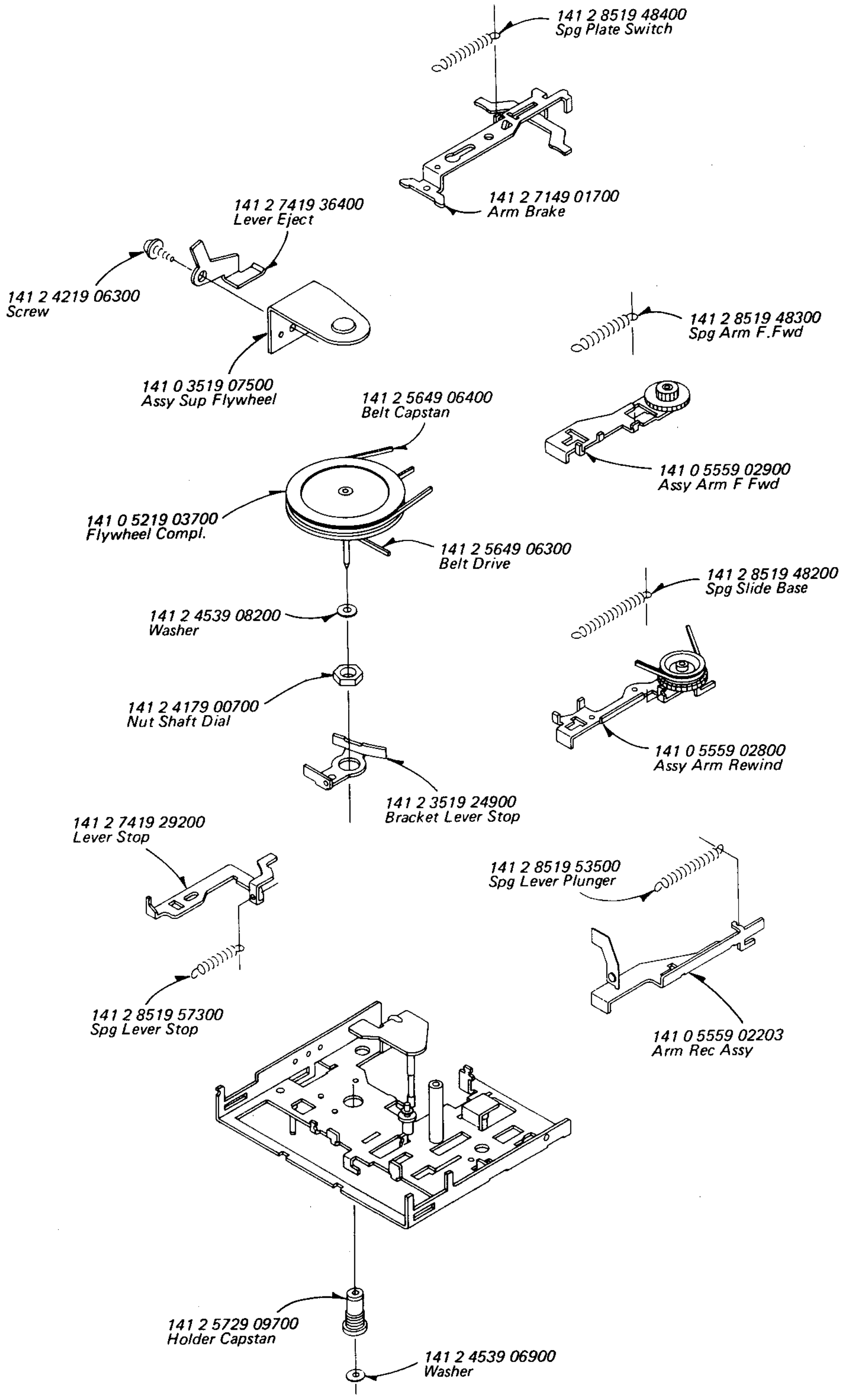
EXPLODED VIEW (Continued)

(Chassis Top)

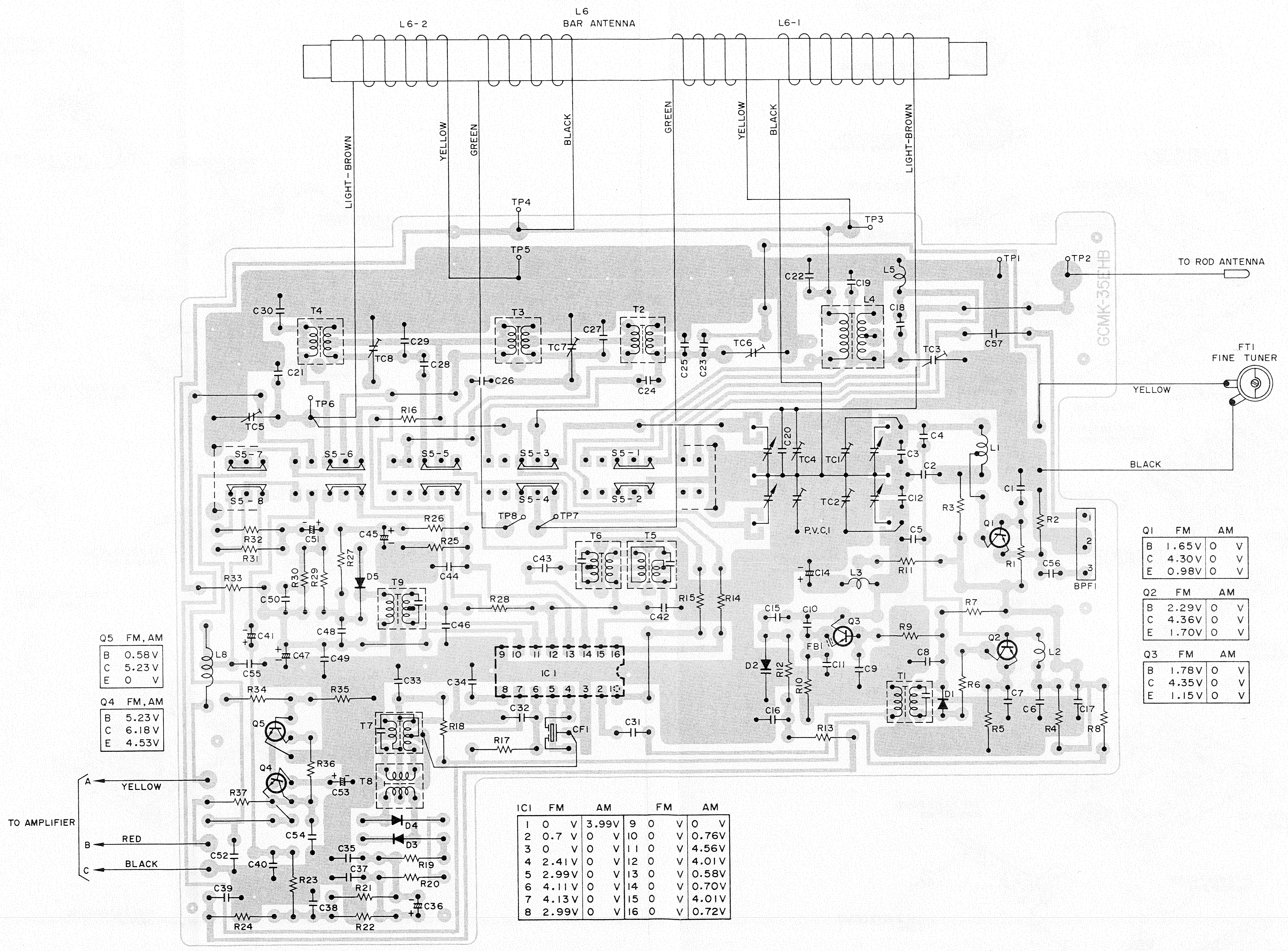

E-2
141 2 4539 12100
Washer Spindle
141 0 5319 03200
Reel Supply Compl
141 0 5319 03100
Assy Reel Take-up
141 0 5319 02501
Assy Pulley Take-up
141 2 8519 25900
Spg Arm Rewind
141 2 8519 76000
Spring Stop
+PTS-3 2.5x10
+PMS
2.6x12
141 2 8519 25900
Spg Arm Rewind
141 2 8539 19500
Spg Take-up
141 2 4729 03600
Lug
+BTS-3 2x6
+PTS-2
2.6x8
+PMS
2.6x12
141 2 6139 10800
Frame Select
-CMS 2x8
+BTS-3 2x5
141 0 6119 02602
Lever F.F. Assy
4 2429 70280
Erase Head
+PTS-2 2.6x6
141 2 4219 02900
Screw
4 2429 71090
R/P Head
141 0 6119 02605
Lever Rec Assy
141 0 6119 02601
Lever Stop Assy
141 2 8519 47400
Spring Head
141 2 3529 11700
Spacer Stop
141 0 6119 02604
Lever Rewind Assy
E-2
141 0 6119 02603
Lever Play Assy
141 0 5419 02200
Pinch Roller Assy
141 0 6119 02600
Lever Eject Assy
141 0 7419 13200
Assy Plate Sensor
141 2 8519 47900
Spg Pinch Roller
141 2 6139 10700
Frame Select But
G Ring-3
141 2 5729 10900
Holder Reel
141 2 7319 20301
Base Slide
141 2 7319 24500
Plate Sl Eject
141 0 3119 11700
Assy Chassis
141 2 8519 48200
Spg Slide Base
141 2 4219 06300
Screw
141 2 8519 25900
Spg Arm Rewind
141 2 7319 21800
Plate Lock
141 2 5519 26200
Pulley Counter
141 2 8519 25100
Spg Interlock Lever

EXPLODED VIEW (Continued)

(Chassis Bottom)


141 2 8519 48400
Spg Plate Switch
141 2 7419 36400
Lever Eject
141 2 7149 01700
Arm Brake
141 2 4219 06300
Screw
141 2 8519 48300
Spg Arm F.Fwd
141 0 3519 07500
Assy Sup Flywheel
141 2 5649 06400
Belt Capstan
141 0 5559 02900
Assy Arm F Fwd
141 0 5219 03700
Flywheel Compl.
141 2 5649 06300
Belt Drive
141 2 8519 48200
Spg Slide Base
141 2 4539 08200
Washer
141 2 4179 00700
Nut Shaft Dial
141 0 5559 02800
Assy Arm Rewind
141 2 3519 24900
Bracket Lever Stop
141 2 7419 29200
Lever Stop
141 2 8519 53500
Spg Lever Plunger
141 2 8519 57300
Spg Lever Stop
141 0 5559 02203
Arm Rec Assy
141 2 5729 09700
Holder Capstan
141 2 4539 06900
Washer

WIRING DIAGRAM(Tuner)


L6
BAR ANTENNA
L6-2
L6-1
LIGHT-BROWN
YELLOW
GREEN
BLACK
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TO ROD ANTENNA
GCMK-351EHB
FT1
FINE TUNER
YELLOW
BLACK
BPF1
T1
T2
T3
T4
T5
T6
T7
T8
T9
TC1
TC2
TC3
TC4
TC5
TC6
TC7
TC8
P.V.C.1
S5-1
S5-2
S5-3
S5-4
S5-5
S5-6
S5-7
S5-8
IC1
CF1
FB1
Q1
Q2
Q3
Q4
Q5
D1
D2
D3
D4
D5
L1
L2
L3
L4
L5
L8
TO AMPLIFIER
A
B
C
YELLOW
RED
BLACK

Q5	FM, AM
B	0.58V
C	5.23V
E	0 V

Q4	FM, AM
B	5.23V
C	6.18V
E	4.53V

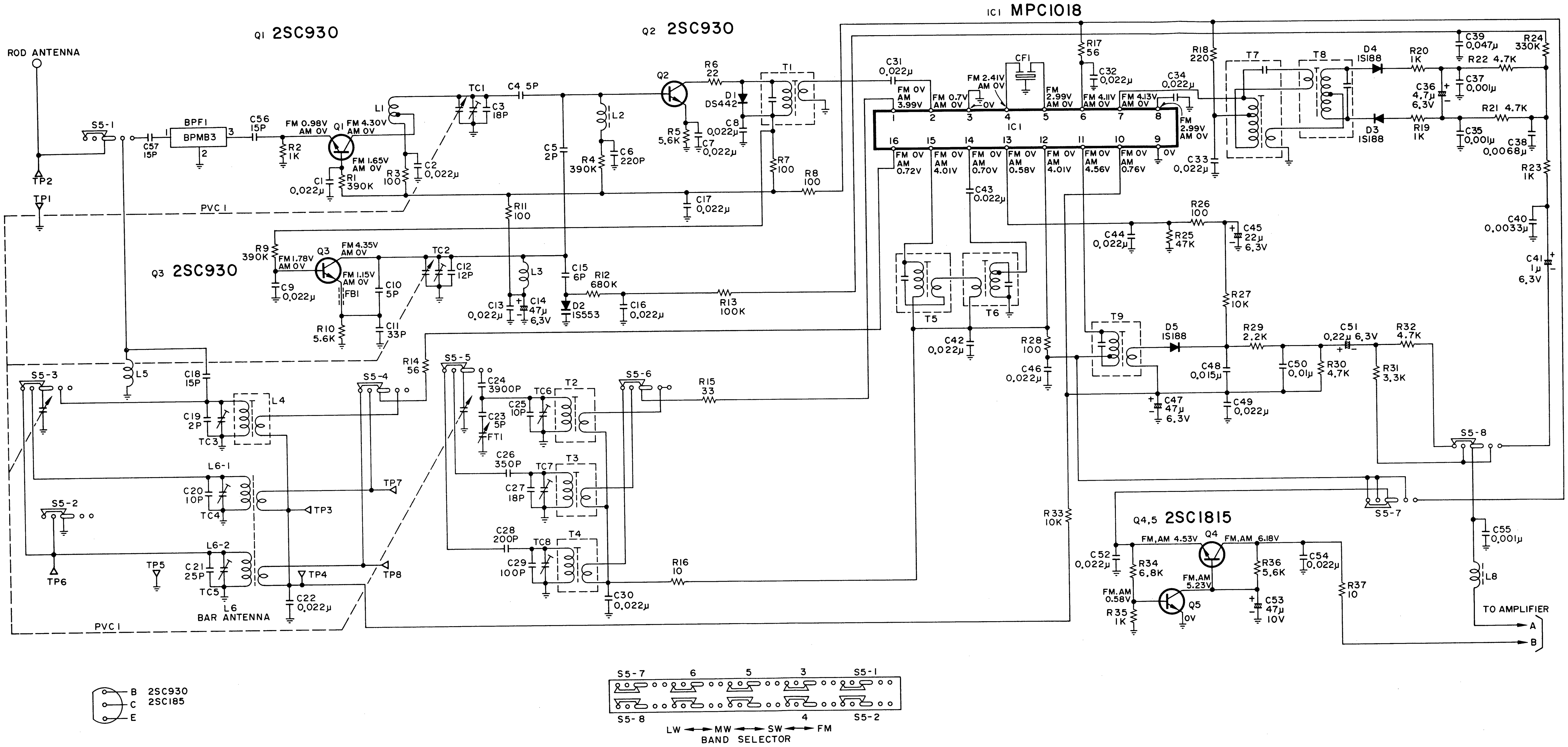
Q1	FM	AM
B	1.65V	0 V
C	4.30V	0 V
E	0.98V	0 V

Q2	FM	AM
B	2.29V	0 V
C	4.36V	0 V
E	1.70V	0 V

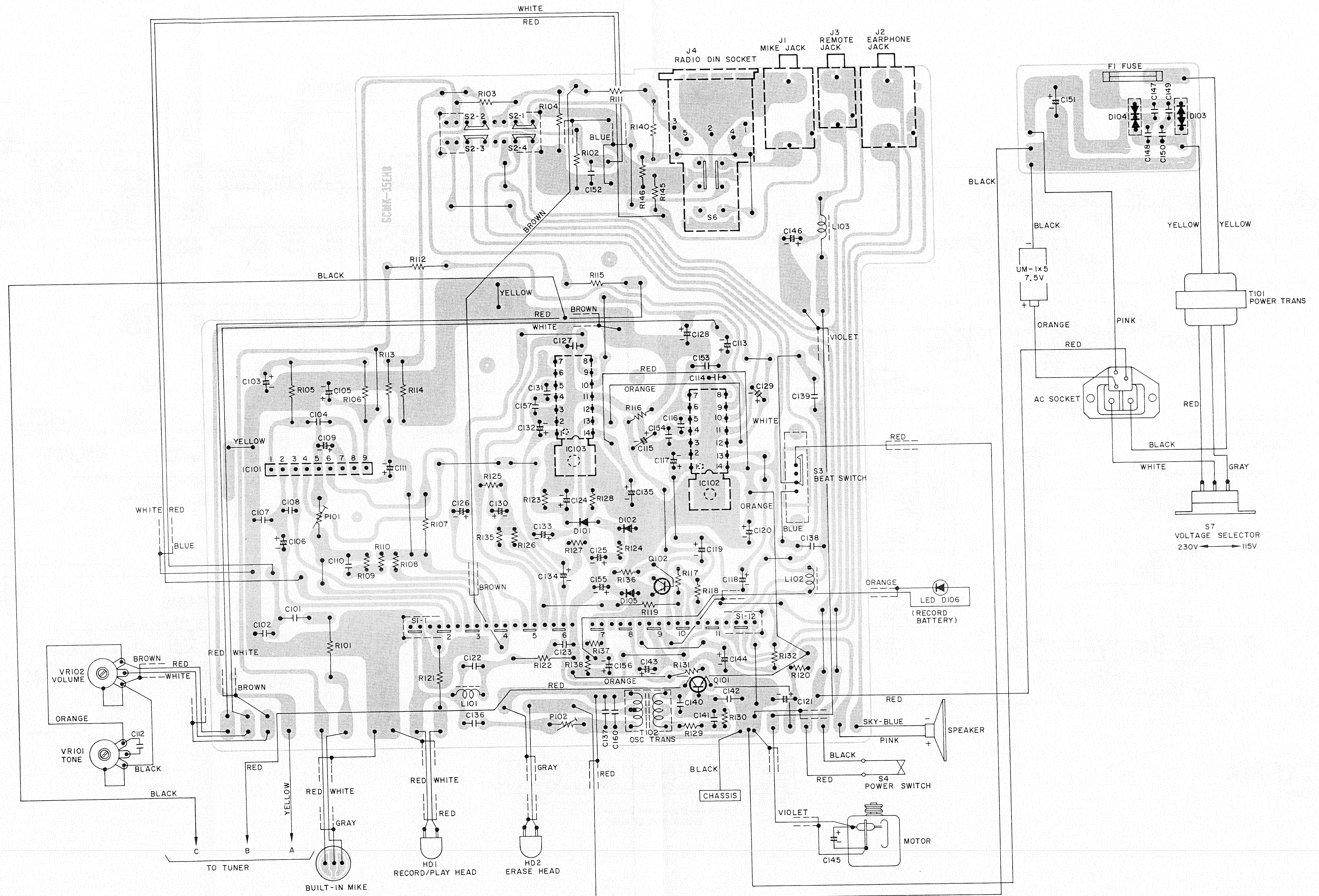
Q3	FM	AM
B	1.78V	0 V
C	4.35V	0 V
E	1.15V	0 V

IC1	FM	AM		FM	AM
1	0 V	3.99V	9	0 V	0 V
2	0.7 V	0 V	10	0 V	0.76V
3	0 V	0 V	11	0 V	4.56V
4	2.41V	0 V	12	0 V	4.01V
5	2.99V	0 V	13	0 V	0.58V
6	4.11V	0 V	14	0 V	0.70V
7	4.13V	0 V	15	0 V	4.01V
8	2.99V	0 V	16	0 V	0.72V

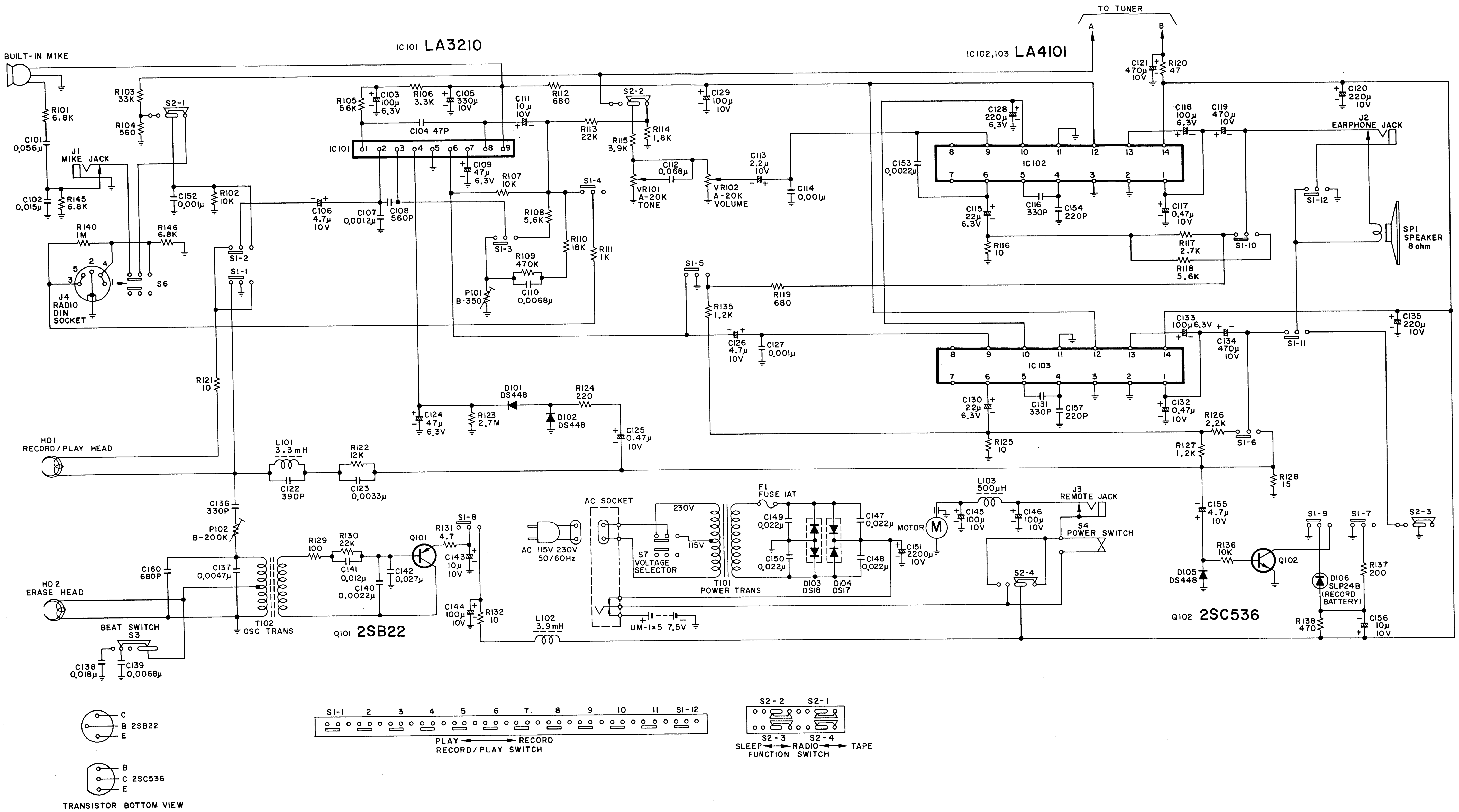
SCHEMATIC DIAGRAM(Tuner)


ROD ANTENNA
Q1 2SC930
Q2 2SC930
Q3 2SC930
IC1 MPC1018
Q4,5 2SC1815
S5-1
BPF1
BPMB3
C57 15P
C56 15P
R2 1K
FM 0.98V AM 0V
FM 4.30V AM 0V
FM 1.65V AM 0V
R1 390K
C1 0.022μ
R3 100
C2 0.022μ
L1
TC1
C3 18P
C4 5P
C5 2P
L2
R4 390K
C6 220P
R6 22
D1 DS442
C8 0.022μ
R5 5.6K
C7 0.022μ
T1
R7 100
R8 100
C17 0.022μ
R11 100
PVC1
TP1
TP2
R9 390K
FM 1.78V AM 0V
FM 4.35V AM 0V
FM 1.15V AM 0V
FB1
C9 0.022μ
R10 5.6K
C10 5P
C11 33P
TC2
C12 12P
L3
C13 0.022μ
C14 47μ 6.3V
C15 6P
D2 1S553
R12 680K
C16 0.022μ
R13 100K
R14 56
S5-3
L5
C18 15P
C19 2P
TC3
L4
S5-4
S5-5
C24 3900P
C23 5P
FT1
TC6
C25 10P
T2
S5-6
R15 33
C26 350P
TC7
C27 18P
T3
C28 200P
TC8
C29 100P
T4
R16 10
C30 0.022μ
L6-1
C20 10P
TC4
TP7
TP3
S5-2
L6-2
C21 25P
TC5
TP4
TP8
TP5
TP6
C22 0.022μ
L6 BAR ANTENNA
C31 0.022μ
FM 0V AM 3.99V
FM 0.7V AM 0V
FM 2.41V AM 0V
0V
CF1
FM 2.99V AM 0V
FM 4.11V AM 0V
FM 4.13V AM 0V
FM 2.99V AM 0V
0V
FM 0V AM 0.72V
FM 0V AM 4.01V
FM 0V AM 0.70V
FM 0V AM 0.58V
FM 0V AM 4.01V
FM 0V AM 4.56V
FM 0V AM 0.76V
1 2 3 4 5 6 7 8
16 15 14 13 12 11 10 9
IC1
R17 56
C32 0.022μ
C34 0.022μ
C33 0.022μ
R18 220
T7
T8
D4 1S188
D3 1S188
R20 1K
R19 1K
C36 4.7μ 6.3V
C37 0.001μ
C35 0.001μ
C38 0.0068μ
C39 0.047μ
R24 330K
R22 4.7K
R21 4.7K
R23 1K
C40 0.0033μ
C41 1μ 6.3V
C43 0.022μ
C44 0.022μ
R26 100
R25 47K
C45 22μ 6.3V
T5
T6
C42 0.022μ
R28 100
C46 0.022μ
R27 10K
T9
D5 1S188
R29 2.2K
C51 0.22μ 6.3V
R32 4.7K
C48 0.015μ
C50 0.01μ
R30 4.7K
R31 3.3K
C47 47μ 6.3V
C49 0.022μ
S5-8
S5-7
R33 10K
FM,AM 4.53V
Q4
FM.AM 6.18V
C52 0.022μ
R34 6.8K
R36 5.6K
C54 0.022μ
FM.AM 5.23V
FM.AM 0.58V
Q5
0V
R35 1K
C53 47μ 10V
R37 10
C55 0.001μ
L8
TO AMPLIFIER
A
B
B 2SC930
C 2SC185
E
S5-7 6 5 3 S5-1
S5-8 4 S5-2
LW ◄► MW ◄► SW ◄► FM
BAND SELECTOR

WIRING DIAGRAM (Amplifier)


J4 RADIO DIN SOCKET
J1 MIKE JACK
J3 REMOTE JACK
J2 EARPHONE JACK
F1 FUSE
C151
C147
C149
D104
D103
C148
C150
WHITE
RED
BLACK
YELLOW
BROWN
BLUE
ORANGE
PINK
VIOLET
GRAY
SKY-BLUE
R103
R104
R111
R140
R102
C152
R146
R145
S2-1
S2-2
S2-3
S2-4
S6
C146
L103
R112
R115
UM-1×5 7.5V
T101 POWER TRANS
AC SOCKET
S7 VOLTAGE SELECTOR
230V ◄──► 115V
C127
C128
C113
C153
C114
C129
C139
R113
R114
R105
C105
R106
C103
C104
C109
IC101
C111
C131
C157
C132
IC103
R116
C116
C154
C115
C117
IC102
S3 BEAT SWITCH
R125
R123
C124
R128
C135
C120
C138
C107
C108
P101
R107
C126
C130
C106
C133
D101
D102
R135
R126
R127
C125
R124
C119
C110
R110
R109
R108
C134
Q102
R117
C118
L102
C155
R136
D105
R118
R119
LED D106 (RECORD BATTERY)
C101
C102
R101
SI-1
SI-12
C122
R122
C123
R137
R138
C156
C143
R131
C144
R132
R120
Q101
R121
L101
C136
P102
C137
C160
T102 OSC TRANS
C140
C142
C141
R130
R129
C121
SPEAKER
S4 POWER SWITCH
CHASSIS
MOTOR
C145
VR102 VOLUME
VR101 TONE
C112
TO TUNER
C
B
A
BUILT-IN MIKE
HD1 RECORD/PLAY HEAD
HD2 ERASE HEAD
6CMK-35EN8

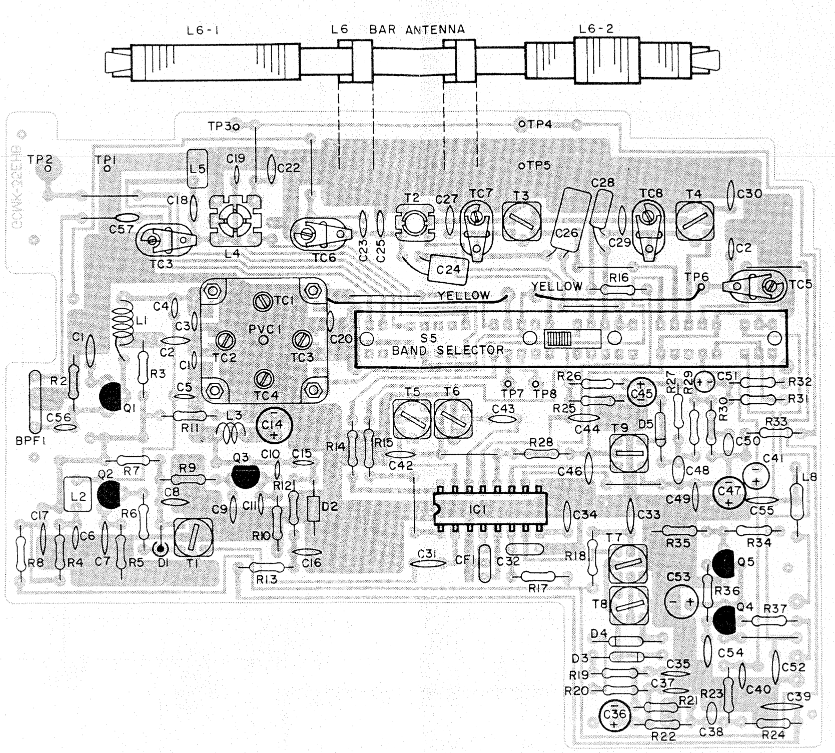
SCHEMATIC DIAGRAM(Amplifier)



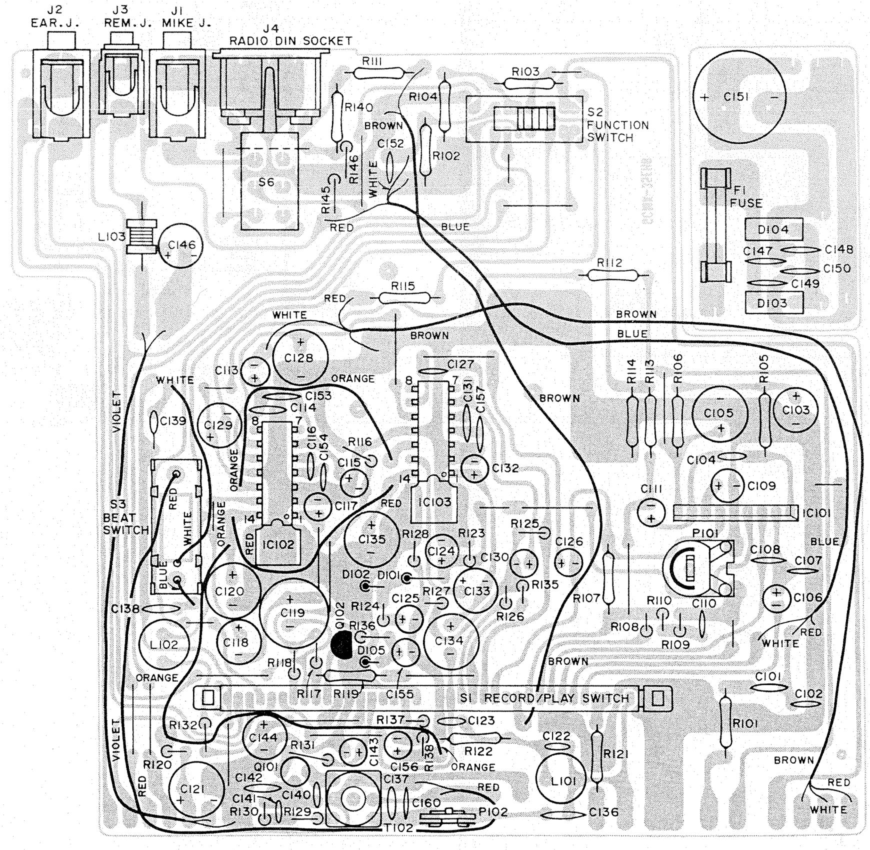
TO TUNER
A
B
BUILT-IN MIKE
IC101 LA3210
IC102,103 LA4101
R101 6.8K
C101 0.056µ
C102 0.015µ
R145 6.8K
J1 MIKE JACK
R103 33K
R104 560
S2-1
C152 0.001µ
R102 10K
R140 1M
R146 6.8K
S1-2
S1-1
S6
J4 RADIO DIN SOCKET
R105 56K
C103 100µ 6.3V
R106 3.3K
C105 330µ 10V
C104 47P
C111 10µ 10V
R112 680
C109 47µ 6.3V
R107 10K
C106 4.7µ 10V
C107 0.0012µ
C108 560P
R108 5.6K
S1-3
S1-4
R109 470K
C110 0.0068µ
R110 18K
R111 1K
P101 B-350
S2-2
C129 100µ 10V
R113 22K
R114 1.8K
R115 3.9K
C112 0.068µ
VR101 A-20K TONE
VR102 A-20K VOLUME
C113 2.2µ 10V
C114 0.001µ
S1-5
R119 680
R135 1.2K
C126 4.7µ 10V
C127 0.001µ
C121 470µ 10V
R120 47
C128 220µ 6.3V
C118 100µ 6.3V
C119 470µ 10V
C120 220µ 10V
J2 EARPHONE JACK
C153 0.0022µ
IC102
C115 22µ 6.3V
C116 330P
C154 220P
C117 0.47µ 10V
R116 10
R117 2.7K
R118 5.6K
S1-10
S1-12
SP1 SPEAKER 8ohm
C133 100µ 6.3V
C134 470µ 10V
S1-11
C135 220µ 10V
IC103
C130 22µ 6.3V
C131 330P
C157 220P
C132 0.47µ 10V
R126 2.2K
S1-6
R125 10
R127 1.2K
R128 15
R121 10
D101 DS448
R124 220
C124 47µ 6.3V
R123 2.7M
D102 DS448
C125 0.47µ 10V
HD1 RECORD/PLAY HEAD
L101 3.3mH
R122 12K
C122 390P
C123 0.0033µ
C136 330P
P102 B-200K
C160 680P
C137 0.0047µ
HD2 ERASE HEAD
T102 OSC TRANS
BEAT SWITCH S3
C138 0.018µ
C139 0.0068µ
R129 100
R130 22K
C141 0.012µ
C140 0.0022µ
C142 0.027µ
Q101
Q101 2SB22
R131 4.7
S1-8
C143 10µ 10V
C144 100µ 10V
R132 10
L102 3.9mH
AC 115V 230V 50/60Hz
AC SOCKET
S7 VOLTAGE SELECTOR
230V
115V
T101 POWER TRANS
F1 FUSE 1AT
C149 0.022µ
C150 0.022µ
D103 DS18
D104 DS17
C147 0.022µ
C148 0.022µ
C151 2200µ 10V
UM-1×5 7.5V
MOTOR
M
L103 500µH
C145 100µ 10V
C146 100µ 10V
J3 REMOTE JACK
S4 POWER SWITCH
S2-4
C155 4.7µ 10V
R136 10K
Q102
D105 DS448
S1-9
S1-7
S2-3
R137 200
D106 SLP24B (RECORD BATTERY)
R138 470
C156 10µ 10V
Q102 2SC536
C B E 2SB22
B C E 2SC536
TRANSISTOR BOTTOM VIEW
S1-1 2 3 4 5 6 7 8 9 10 11 S1-12
PLAY ◄──► RECORD
RECORD/PLAY SWITCH
S2-2 S2-1
S2-3 S2-4
SLEEP ◄─► RADIO ◄─► TAPE
FUNCTION SWITCH

PARTS LOCATION

(Tuner P.C.B.)


L6-1
L6 BAR ANTENNA
L6-2
TP3
TP4
TP5
TP2
TP1
L5
C19
C22
C18
C57
TC3
L4
TC6
C23
C25
T2
C27
TC7
T3
C28
C26
C29
TC8
T4
C30
C2
C24
YELLOW
YELLOW
R16
TP6
TC5
C4
C3
L1
TC1
PVC1
C20
S5
BAND SELECTOR
C1
C2
C1
TC2
TC3
R2
R3
C5
TC4
R26
R27
R29
C51
R32
R31
Q1
C56
BPF1
R11
L3
C14
T5
T6
TP7
TP8
C43
R25
C45
C44
T9
D5
R30
R33
C50
Q2
R7
R9
Q3
C10
C15
R121
R14
R15
C42
R28
C46
C48
C41
L8
L2
C8
C9
C11
D2
IC1
C49
C47
C55
C17
R6
R10
C34
C33
R35
R34
C6
T1
T7
R8
R4
C7
R5
D1
C16
C31
CF1
C32
R18
Q5
R13
R17
C53
R36
T8
Q4
R37
D4
C54
D3
C35
C52
R19
C37
R20
R21
R23
C40
C39
C36
R22
C38
R24

(Amplifier P.C.B.)


J2
EAR.J.
J3
REM.J.
J1
MIKE J.
J4
RADIO DIN SOCKET
R111
R103
C151
R140
R104
BROWN
S2
FUNCTION
SWITCH
C152
R102
S6
R146
WHITE
R145
F1
FUSE
RED
BLUE
D104
L103
C146
C147
C148
C150
C149
R112
D103
R115
RED
WHITE
BROWN
BROWN
BLUE
C128
C127
C113
ORANGE
WHITE
R114
R113
R106
R105
C153
C131
C157
VIOLET
C114
BROWN
C139
C129
C116
C154
R116
C105
C103
C115
C132
C104
S3
BEAT
SWITCH
RED
ORANGE
WHITE
C117
IC103
C111
C109
RED
IC101
ORANGE
C135
R125
P101
R128
R123
IC102
C124
C130
C126
BLUE
C108
C107
BLUE
D102
D101
R135
C133
C120
R127
C125
R124
C106
C138
C119
R107
R110
C110
R126
R136
C134
R108
R109
RED
L102
C118
Q102
D105
WHITE
R118
BROWN
ORANGE
C101
C102
R117
R119
C155
S1 RECORD/PLAY SWITCH
R132
R137
C123
R101
C144
R131
C122
VIOLET
C143
R138
R121
R120
Q101
C156
R122
BROWN
C142
ORANGE
RED
C137
RED
C121
C141
C140
L101
C160
R130
R129
P102
C136
WHITE
T102